**Remarks**

The various parts of the Office Action (and other matters, if any) are discussed below under appropriate headings.

***Claim Rejections - 35 USC § 102***

Claims 1-16 and 18-22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,026,316 (referred to as *Kucharczyk*), and/or as being unpatentable over *Kucharczyk* standing alone and/or in view of U.S. Patent No. 6,272,370 (referred to as *Gillies)* and/or U.S. Patent No. 6,233,476 (referred to as *Strommer).* Withdrawal of the rejections is respectfully requested for at least the following reasons.

Claim 1 recites a method for planning the introduction of a fluid in a tissue that includes, *inter alia*, capturing via an imaging system functional anatomical data and/or structural anatomical data before infusion of a fluid into the tissue, evaluating the captured functional and/or structural anatomical data with computer assistance and *without use of an infusion fluid*, and based on the evaluating step, identifying directional channels within the tissue and determining infusion distribution information related to the identified directional channels.

The claimed invention facilitates the identification of advantageous and/or non-advantageous infusion regions based on a capture and evaluation of functional and/or structural *before infusion of a fluid into the tissue.* The functional and/or structural anatomical data is evaluated *without use of an infusion fluid* to identify directional channels and/or associated infusion distribution information *before infusion fluid is introduced into the tissue.*

As stated in the reply to the Office Action dated September 4, 2007, *Kucharczyk* is concerned with tracking the location of delivered materials – i.e., imaging and tracking fluids *after they are infused* into a patient.[1] By infusing the fluid, and then tracking and/or imaging the already-infused fluid, *Kucharczyk* cannot reasonably be interpreted to disclose the method recited in claim 1.

In rejecting claim 1, the Examiner relies on Fig. 7 of *Kucharczyk*, which is reproduced below. More specifically, the Examiner identifies the three horizontal boxes of Fig. 7 as teaching the step of evaluating the captured functional and/or structural anatomical data with computer assistance and without use of an infusion fluid. Further, the Examiner identifies the next step (sixth from the bottom) as teaching based on the

[1] *Kucharczyk* includes many passages consistent with this understanding. See, e.g., col. 7, ln 8-10, col. 7, ln. 45-55, col. 8, ln. 12-15, col. 8, ln. 57-61, col. 11, ln. 13-18.

evaluating step, *identifying directional channels within the tissue* and determining infusion distribution information related to the identified directional channels, the identified directional channels and/or infusion distribution information being indicative of advantageous and/or non-advantageous infusion regions.

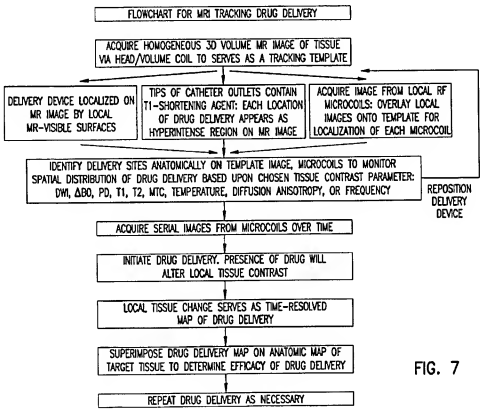


FIG. 7

Referring to the three horizontal boxes of Fig. 7, several steps are disclosed. First, a delivery device is localized on an MR image by MR-visible surfaces (left-most box). Second, tips of catheter outlets are configured to include a T1-shortening agent, which enables each location of drug delivery from the catheter tip to appear as hyper-intense region on the MR image (center box). Third, images are acquired from local RF microcoils, and these obtained images are overlaid onto a tracking template (i.e., a 3D volume MR image obtained in the first box of Fig. 7).

In the subsequent step (sixth from the bottom of Fig. 7), it is disclosed that delivery sites are identified anatomically on the template image. In other words, this step of Fig. 7 identifies *where* the catheter will be inserted in order to deliver the agent. Identifying such delivery sites (i.e., where the catheter will be placed), however, does not *identify directional channels within the tissue*, as set forth in claim 1.

Fig. 7 further discloses that microcoils are used to *monitor the spatial distribution of the drug delivery* based on chosen tissue contrast parameters. However, since the

drug has not yet been delivered (the drug is not delivered until the fourth step from the bottom of Fig. 7), and since *Kucharczyk* determines efficacy of drug delivery by monitoring the distribution of the drug using MR images (see second and third boxes from the bottom of Fig. 7), this portion also does not disclose identifying *directional channels in the tissue*, as recited in claim 1.

Accordingly, the Examiner has not shown that *Kucharczyk* teaches or fairly suggests evaluating the captured functional and/or structural anatomical data with computer assistance and *without use of an infusion fluid*, and based on the evaluating step, *identifying directional channels within the tissue* and determining infusion distribution information related to the identified directional channels, the identified directional channels and/or infusion distribution information being indicative of advantageous and/or non-advantageous infusion regions, as recited in claim 1. *Gillies* and *Strommer* are not understood to cure the deficiencies of *Kucharczyk* with respect to claim 1. Similar comments are applicable to claims 18 and 22.

In view of the above, withdrawal of the rejections of claims 1, 18 and 22 is respectfully requested. The remaining claims depend from one of the above claims and therefore, can be distinguished from the cited art for at least the same reasons.

***Conclusion***

In view of the foregoing, request is made for timely issuance of a notice of allowance.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By /Kenneth W. Fafrak/
Kenneth W. Fafrak, Reg. No. 50,689

1621 Euclid Avenue
Nineteenth Floor
Cleveland, Ohio 44115
(216) 621-1113

M:\S\SCHW\P\P0177\P0177USA-R04.wpd